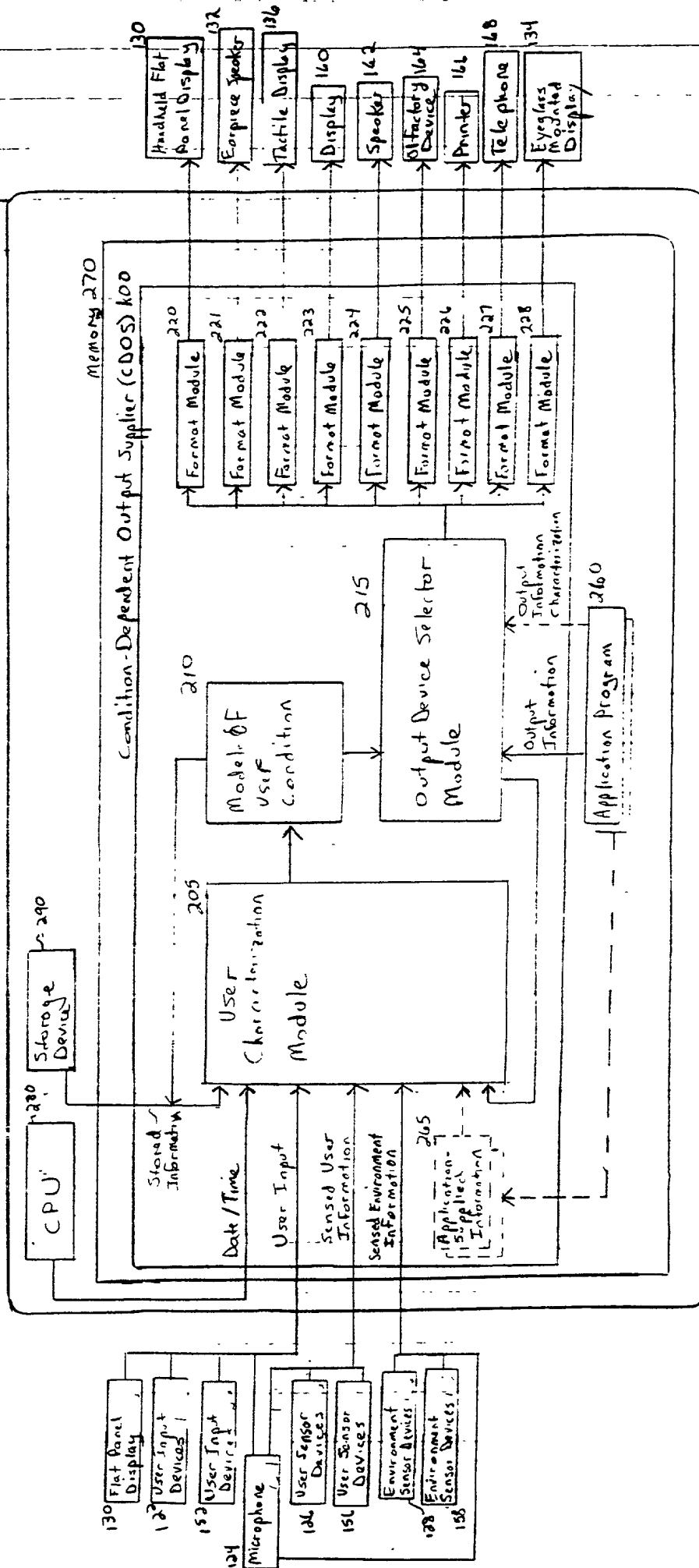


Figure 1

Figure 2

Body Mounted Computer 120



Model of User Condition 210

User: X Time: 14:22 Date: 10/15/XX		
Latitude	37°55.3'N	
Longitude	95°24.7'W	
Altitude	102'	
Heart Rate	57 beats/minute	
Blood Pressure	125 / 80	
Last User Input	Voice Command "Stop Recording"	
Ambient Temperature	67° F	
Ambient Noise	20 dB	
Location	Office	
Speed	2 MPH	+/- 10%
Nearby Objects	Desk	
Nearby People	Physical: None, Audio: "Doug Smith"	
User Activity	Talking On Cell Phone, Working	Highly Likely
Cognitive Load	77	
Level Of Privacy	Company, Executive	
Source Of Assistance	Self	
Application X - Factor 1	Normal: Mean -23, Std Dev 3	
User Format Preference	Visual > Auditory	
User Device Preference	Eyeglass Mounted Display	
<ul style="list-style-type: none"> 		

Fig. 3

User Characterization Module 205

User: X

```

IF <Latitude> ≈ "37°55.2'N" AND <Longitude> ≈ "95°24.7'W" THEN <Location> = "Office"
IF <Infrared.Link.To.Desktop> = True THEN <Nearby Objects> Includes "Desk"
IF <Voice.Recognition.ID> <> "X" AND <Speakerphone.Status> = "Disabled"
    THEN <Nearby People> Includes ValueOf<Voice.Recognition.ID>
IF <Desktop.Motion.Sensor.Human.Movement> = True AND <User Activity>
    Includes "Seated" THEN <Nearby People.Physical> Includes "Unidentified Person"
IF <User Activity> = "Walking" THEN <Cognitive Load> = 20
IF <User Activity> = "Talking *" THEN <Cognitive Load> = 55
IF <User Activity> Includes "Walking" AND <User Activity> Includes
    "Talking On Cell Phone" THEN <Cognitive Load> = 77
WHILE <Output.To.User> = True THEN <Cognitive Load> = +10
WHILE <User.Mood> Includes "Angry" THEN <Cognitive Load> = +20%
IF <Nearby People.*> Includes Only [Company Executives] THEN
    <Level Of Privacy> Includes "Executive"
IF <Nearby People.*> Includes Only [Company Employees] THEN
    <Level Of Privacy> Includes "Company"
IF <Nearby People.Physical> = "None" THEN <Scope Of Audience> = "Self"
IF <Output.Intrusive.To.Others> = "Likely" THEN <Scope Of Audience> = "Self"
AppX: IF <Application X -Factor ±.Mean> > 25 THEN
    <Application X Output> = "Undesired" WITH Likelihood "Likely"
IF (<Current Time> - <Time.Of.Last.User.Input>) > 5 min THEN <Interacting.W.th.Computer>
    = False WITH Likelihood "Somewhat Likely"
    
```

Fig 4

Output Device Selector Module 2/5

User: X									
Device	Currently Available	In Use	Supported Senses	Cognitive Load	Level of Privacy	Scope of Audience	Degree of Interactivity	Degree of Intrusiveness On Others	
Handheld Flat Panel Display 130	X		Visual, Audio	Very Low - Medium	All	Self [4-3]	Low	Very Low	
Earpiece Speaker 132	X	X	Audio	Very Low - Somewhat High	All	Self	Low - Very High	Very Low	
Eyeglass Mounted Display 134	X		Visual	Very Low - Somewhat Low	All	Self	Medium - High	Very Low	
Tactile Display 136	X		Tactile	Very Low - Very High	All	Self	Very Low - Very High	Very Low	
Display 160	X		Visual	Very Low - Somewhat High	Business, Sensitive	Self + 6	Low - Medium	Very Low - Medium	
Speaker 162	X		Audio	Low - Somewhat High	Business	Many	Medium - High	Low - Very High	
Olfactory Device 164	X		Olfactory	Medium - Somewhat High	Close Friends	Many	Very Low - Somewhat Low	Medium - Very High	
Printer 166	X		Visual	Very Low - Very High	Business	Unlimited	Very Low	Somewhat High	
Telephone 168	X		Audio	Very Low - Medium	Family	Self	High - Very High	High - Very High	
Pager 502			Visual, Audio, Tactile	Very Low - High	All	Self	High	Medium - Very High	
Cellular Telephone 504			Audio	Very Low - Medium	Highly Sensitive	Self	Medium - High	High - Very High	
Car Radio 506			Audio	Low - Somewhat High	Sensitive	Self + few	Low - High	High	
...									

Fig. 5

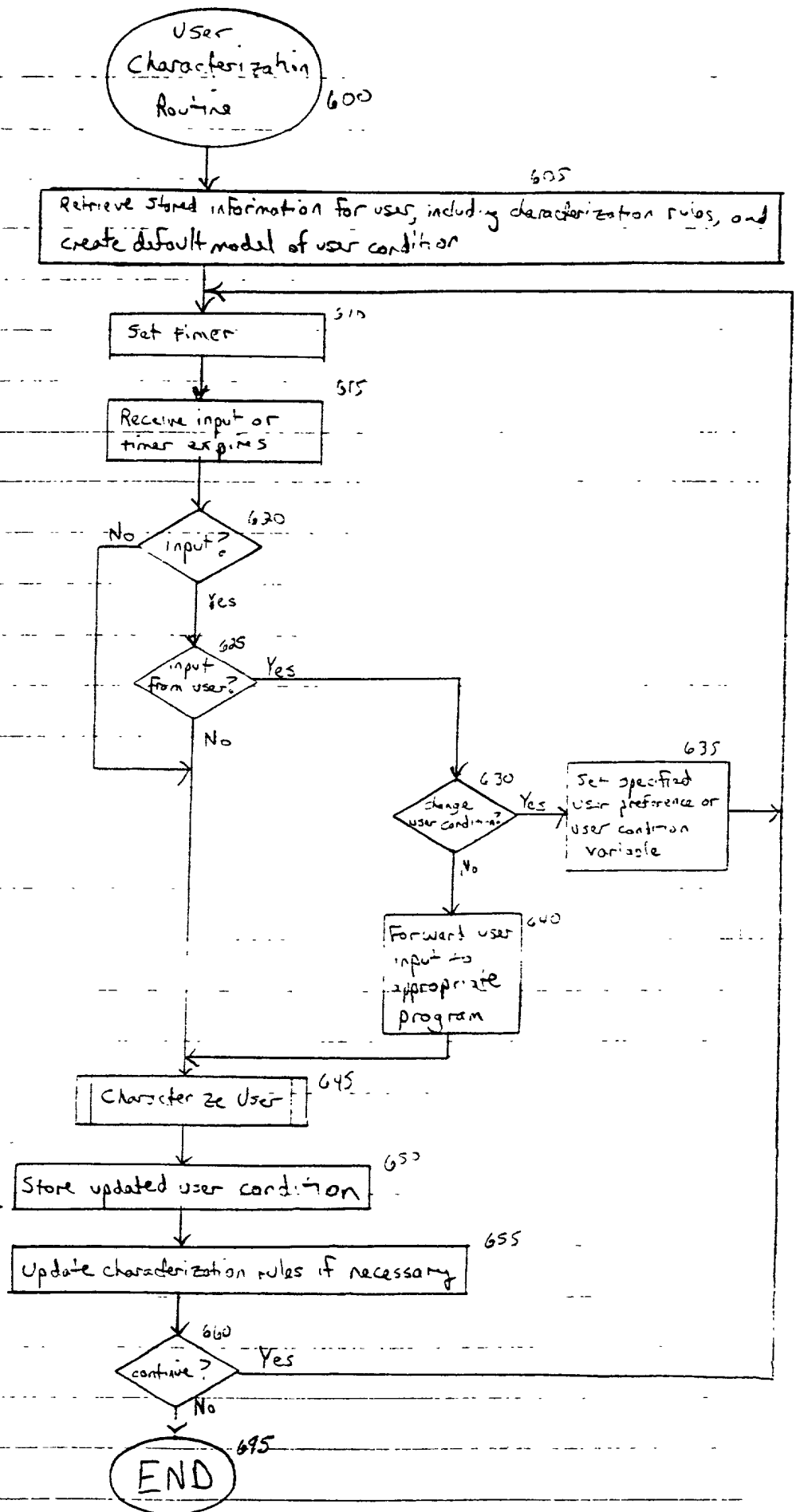


Fig. 6

Fig. 7

Characterize
User
Subroutine

645

705

Retrieve current model of
user condition

710

Retrieve current date & time

Input received?

715

No

Yes

730

New condition variable?

Yes

735

New Characterization Rule?

No

745

Add new characterization
rule, determine if current
condition variable values
trigger the rule, and if
so propagate changes
through rules

740

Determine if current
input or current date
& time trigger any
rules, and if so
propagate changes
through rules

Examine condition variables
that represent time-sensitive
or historical data to
determine if they should
be updated

720

Determine if current
date & time trigger any
rules, and if so propagate
changes through rules

725

Store any changes
in condition variables
and their values,
including date & time,
in updated model of
user condition

750

RETURN

755

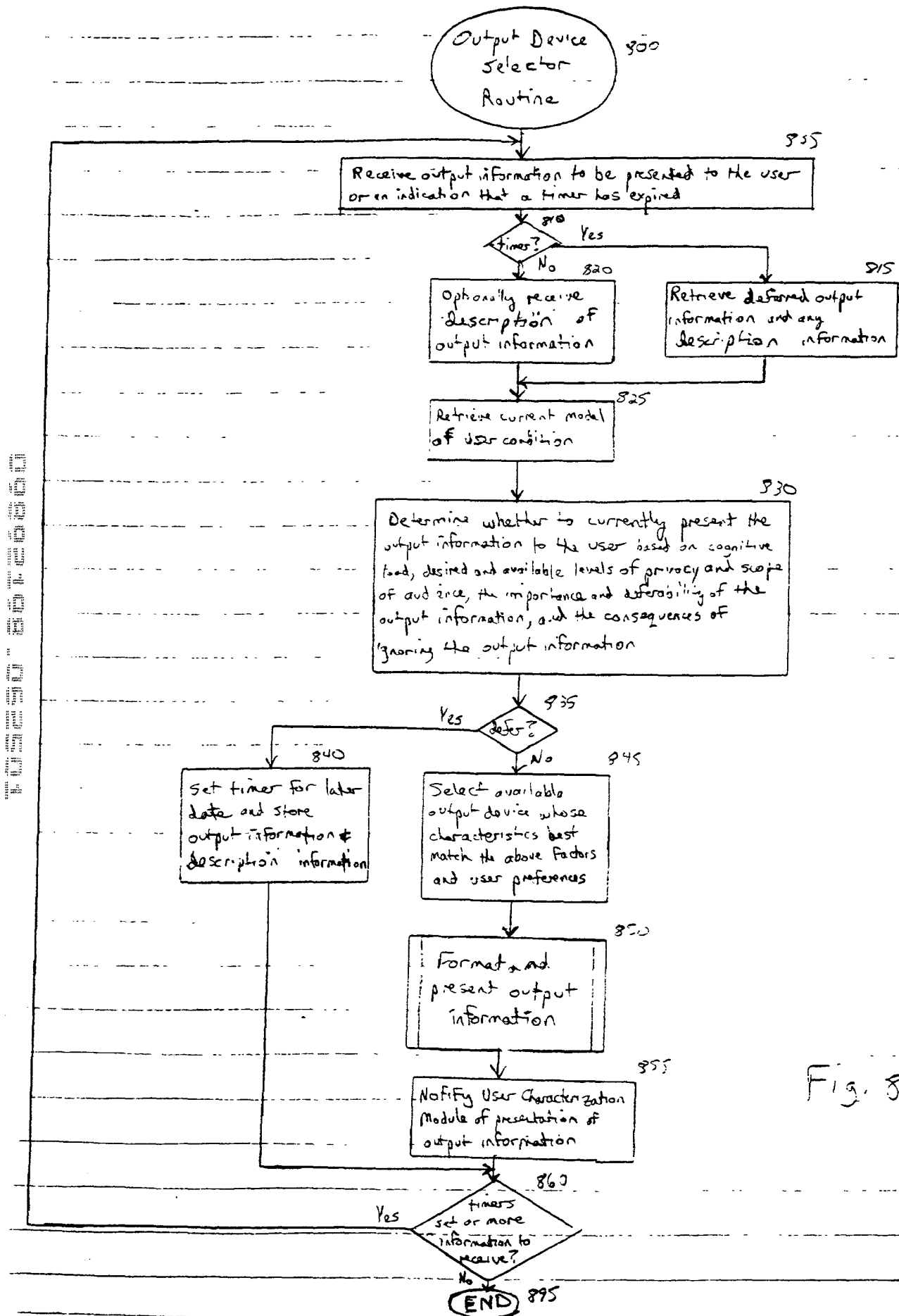


Fig. 8

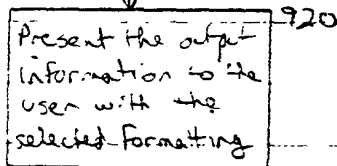
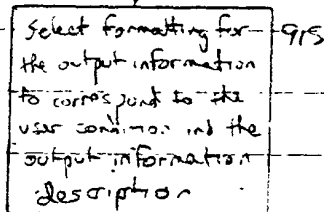
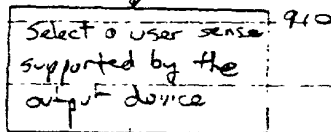
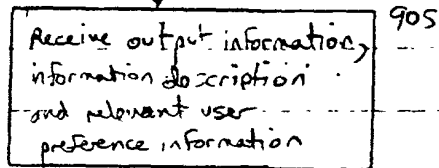
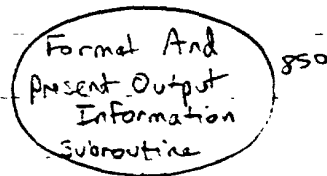


Fig. 9